Robots in Manufacturing Environments (RIME)

Proposers' Day questions

Questions from 8/10 NASA Ames Proposers' Day

1. **What level of detail is needed for the concept paper that is due on September 1st? A lot is asked in the FOA/appendices.**

   A:
   - There is a page limit for each category on page 17 of the FOA, for concept papers. Applicants should provide adequate detail within the page limit to enable the government to fully assess/rate the applicant's potential to develop a competitive proposal.

2. **Does RIME-MII (DoD) require a 65% technical projects + 20% workforce development + 15% operations for federal funding?**

   A:
   - The FOA does not specify funding level break down. The government is looking for the applicant's vision for effective resourcing and functioning of the institute.

3. **Is 1:1 fund matching on the project level required or only at the institute (memberships) level?**

   A:
   - There is no requirement for 1:1 matching funds (for federal funding) at the project level, only at the Institute level as a whole. It is up to each applicant to provide a strategy that includes methods to achieve that minimum cost match ratio. Please refer to Paragraph B on Page 12 of the FOA for precise requirements, including the following: Cost-sharing is not required to precisely align with this funding profile on a yearly basis. Ultimately, the government does require a schedule to meet the minimum of $80M of non-federal government funding cost share by September 2021 within the proposal and updated progress towards that plan will be a required report (See Section I. B.).

4. **Is the intention that the proposal already contains an RFP to kick-off the institute? (initial request for project proposals in the institute proposal)**

   A:
   - No. There is no expectation for a "pre-developed RFP". The example projects called for in the FOA evaluation criteria factor 2 on pages 29 and 30 are required for proposal evaluation purposes only.

5. **Where should the educational and workforce development emphasis be placed considering the inclusion of "K through grey"?**

   A:

   - The government does not specify the degree of emphasis across the range of educational levels. Rather the applicant's workforce development plans should be based the applicant's vision for the proposed institute and its associated technology development space, which the government in turn will evaluate.

6. **Is the funding $80M fully obligated across the 7 years?**

   A:

   - The $80 million is fully "programmed" by the federal government across a five fiscal year period; however, actual "obligation" of funds is subject to annual appropriation by Congress as is all federal funding.

7. **Can the federal funds be utilized to purchase equipment and capital items?**

   A:

   - Generally, federal funds are not intended for equipment or capital expenses. Specifically, federal Funds cannot be used for the purchase of physical facilities [buildings] or substantial improvements. Cost share should primarily be used for these expenses.

8. **How can a federal entity, like NASA, participate at this stage in the RIME process?**

   A:

   - Federal government agencies such as NASA can provide subject matter experts in support of FOA development and proposal evaluation.
   - Additionally any federal agency can contribute funding to the effort pre- and post-award. NASA for example has and continues to provide subject matter expertise and, in some cases, has funded prizes/challenges at existing MIIs.
   - Federal agencies cannot participate as a team member of a proposing team.

9. **Who is the DoD contact person for asking questions going forward?**

   A:

   - The FOAs point of contact is Mr. Kevin Bassler. His e-mail is provided on page 6 of the FOA. All questions should be directed to him.

10. **Are these institute expected to live after 5 years without the federal matching funds?**

    A:

- Absolutely. The federal government's explicit mission is to act as a catalyst to incentivize the formation of lasting innovation ecosystems built upon the MII model.

11. When are the site visits planned? Before proposals are due? Or after? Or before award is made?

A:

Site visits may be conducted after full proposals are submitted, but before the award is signed.

12 Evaluation criteria: what is the distribution across different factors?

- Factor 1: x%
- Factor 2: y%
- Factor 3: ...
- Factor 4: ...
- For a total of 100%

A:

- The evaluation criteria factors are listed in descending order of importance (page 23 of the FOA). Each sub-factor (within a factor) are of equal importance to each other.

13 The concept paper and proposal must address every thrust area and subarea to be responsive, correct?

A:

- Yes, every thrust area must be addressed in accordance with the concept paper format on page 17 of the FOA.

14 Is this FOA significantly different from the FOAs for DMDII or America Makes? (apart from the technical focus) [in terms of requirements, evaluation criteria, etc.]

A:

- The overall intent is the same, but each FOA stands on its own.

15 Role of private sector at the proposal phase beyond a letter of commitment?

A:

- The private sector should have a significant role in the development of the institute's strategy, business plan, and commercialization plan. It is envisioned that the private sector will have significant input into many elements of the proposal. The private sector will also be expected to populate a number of seats on the various governing bodies/committees.

16 How is this institute linked to other efforts around the world, mainly Germany (Industry 4.0), Japan or China?

A:

- This institute is envisioned to encourage robots in manufacturing environments in the U.S. and to increase U.S. competitiveness globally in this manufacturing technology space.
- Selected sharing of general information occurs between the U.S. and other countries with similar efforts, but there is no direct linkage at the institute or project level with other countries' efforts. Institutes in foreign countries have objectives aligned with their own national interests.

17 **Do you have to be on the winning team to participate? Or is the winning team going to lead the initiative that will be open to everyone to participate in?**
   A:

- The latter. The organization which receives the award will lead the institute, which is intended to be open to all participants that are interested, qualified and accepting of the membership terms and conditions offered by the organization receiving the award. The FOA strongly encourages companies, universities or other organizations from non-selected teams to participate.

18 **Are there published guidelines on best practices to establishing IMIs?**
   A:

- Some guidelines can be found in the January 2013 NNMI Preliminary Design Document as well as the first NNMI Annual Report, published in February 2016. The manufacturing.gov website also contains a variety of other foundational documents for study. The NNMI community continues to improve network governance, practices, and processes that will enable greater sharing of best practices, lessons learned and other benchmark processes.

19 **Is it encouraged [through] criteria (extra points) to have links to other institutes like DMDII?**
   A:

- Defined relationships between existing institutes can be valuable under the right conditions. There are not however, evaluation criteria specifically requiring a description of linkages to other institutes.

20 **This competition appears to be about who will lead the NNMI. What is the incentive for a small company or university research group to join a team, if they can participate once the leading non-profit is identified? To participate in the creation of the structure of the NNMI?**
   A:

- Incentives for small companies or university research groups to join a team include the following:
    - influence the institute's business strategy, membership structure, and suggested projects;
    - show support to the nonprofit leading a team;
    - contribute to the required cost share;
    - make the innovation eco-system more complete with the capabilities small company or university research group provides; and
    - attain potential benefits provided by the institute as an original team member.

Questions from 8/12 ANSER Proposers' Day

1. **Why are you referring to this as the MII not the NNMI?**
   A:

   - Each individual institute is referred to as an MII (Manufacturing Innovation Institute). The overall program, represented by the collective of all of the institutes, coupled with the network function led by the Department of Commerce (DoC), is referred to as the National Network for Manufacturing Innovation, or NNMI.

2. **With an initial plan of up to 15 NNMI Centers, why do you think this may be the last one to be stood up?**
   A:

   - This is expected to be the last MII established by DoD, under the current administration. (DoD will have stood up 8, Department of Energy 5, and DoC up to 2 MIIs) We cannot predict what the next administration might do in terms of establishing additional MIIs.

3. **Are "lead" organizations allowed to receive funding and conduct research under the institute they manage? Or … does the lead org simply manage the funds for other organizations to conduct the research?**
   A:

   - Lead organizations are not expressly prohibited from performing research under the institute. That said, their primary role is to be an independent, objective broker, overseer and lead for institute operations and activities. As such, the organization's performance of significant R&D under the institute could dilute that primary role and would need to be explained.

4. **What limitations are there on purchase of equipment with federal funds?**
   A:

   - There are no regulatory or programmatic limitations. However, an applicant should thoughtfully consider the institutes' goals and carefully consider decisions related to the use of program resources.

5. **The FOA indicates that existing facilities are preferred. Is an existing interim facility acceptable while a new facility is built out?**
   A:

   - Yes. That said, the stated preference for existing facilities is based on the presumption that new facilities may divert resources from meaningful R&D, could delay ecosystem standup and satisfying other near term

institute needs. Applicants should carefully consider the tradeoffs and explain the rationale for establishing new facilities.

6. **Is level of cost sharing a selection criteria?**
   A:

   - Please see page 26 of the FOA. Cost share is one of the seven evaluation criteria that are within Factor 1: Business plan.

7. **Indirect Cost Rough Order of Magnitude (ROM) – How do I develop a ROM for indirect cost when the nonprofit isn't fully stood up? Can I use another organization's indirect cost rates if they are a close representation of what my nonprofit will look like?**
   A:

   - In response to the second question, yes. In that case, the applicant should explain or describe the specific circumstances.

8. **Are individual company commitment letters (with dollar amounts) required at concept paper submission stage?**
   A:

   - While not explicitly required at concept paper stage, individual commitment letters – whether from industry, academia, states, or other – will assist in the evaluation of the "quality of commitments" as stated in the cost share criteria definition on page 26 of the FOA. Commitment letters are not counted against the page limit.

9. **Are drones included under navigation and mobility?**
   A:

   - All mechanisms for navigation and mobility should be considered which may include, but is not limited to, a "through-the-air approach" such as drones, as it pertains to the manufacturing environment.

10. **The audience was not given a chance to introduce themselves. Could we have a show of hands for: industry – for profit; industry – not for profit; academic; government**
    A:

    - Show of hands was made in the room, releasable demographics were published on the LinkedIn site following the second proposers' day and an e-mail with releasable contact information for attendees will be sent.

11. **What are examples of 'dangerous' environments of interest to DoD for manufacturing?**
    A:

    - "Dangerous" situations in defense manufacturing are not appreciably different from dangerous situations in non-defense manufacturing and

can relate to human-robot and/or robot-robot interaction in multiple tasks and extreme environmental conditions. The ultimate goal is to be able to apply collaborative robots in all manufacturing environments, including those which may be considered dangerous.

12. **There appears to be cost share fatigue in industry. Why does the DoD/government think/want more than 1:1 cost share? It would be great like winning the lottery but not likely.**
    A:

- Each MII is in a different technology sector, affecting, for the most part, different industries. Furthermore, industry should look at this as a means to leverage the limited R&D funds they can apply, thereby providing a stronger return on investment (ROI). These MIIs have a requirement to be self-sustaining. Industry investment is a clear and important means of ensuring that these institutes are industry driven.
- The government's primary emphasis is on the fact that 1:1 cost share is the 'floor' and not the 'target' requirement. It recognizes that in the business of resourcing this complex public-private partnership, more funding is generally better. That said, cost share is only part of what is evaluated as part of what needs to be a coherent and effective business plan.

13. **Is cost share subject to DCAA audit of the institute and partners?**
    A:

- The award will be made to a non-profit organization and will be subject to the Single Audit Act requirement, which includes cost share as it is a term of the agreement.

14. **Is the institute responsible financially if cost share has a deficit at the end of 5-years?**
    A:

- The government put thoughtful consideration into selecting this technology area and believes there should be ample resources to achieve the 1:1 minimum cost share requirement. Further, in order for the program goals to be achieved, the resource contributions by both parties (government and applicant cost share) will be necessary. The government will be monitoring cost share throughout the term of the agreement as indicated in the FOA. That said, should the cost share fail to materialize as pledged, the government, as a partner in this agreement would reserve the right to re-consider its interest in this institute.

15. If a deficit in cost share occurs, must payback to DoD be in cash if audit shows disallowed cost share is determined?
    A:

- This would depend on the specifics of the audit and its finding, and whether the deficit was related to a cash cost share commitment.

16. Is there a preferred project duration?
    A:

- There is no preferred duration for projects, although at other MIIs typical projects have tended to average 12-18 months while some ecosystem enabling projects may run the course of the agreement. Project duration should be consistent with the institute's R&D portfolio management strategy, roadmap requirements, and specific technology needs, all balanced against resources available.

17. If you want the lead organization to be an independent management institute but on the other hand want them to be self-sustaining. These two ideas directly oppose each other. How do you see this resolving?
    A:

- The government views the need for 'independence' in the context of the lead organization's ability to act independently and free of conflicts with the members of the institute. The government does not consider this positioning in the institute to preclude the lead organization from focusing on the institute's self-sustainment objective. Please refer to Appendix E: MII Governance considerations for further information.

18. On page 29 of the FOA, when describing the Evaluation Criteria for Innovation Beyond Current Practice, the fourth example applied research project category is referred to as "Application." As the project is further discussed on page 30, it is referred to as "Applicant's Option." Is it correct to assume that the fourth example applied research project category is in fact, "Applicant's Option?"
    A:

- Yes. The description of the fourth example project category on page 29 of the FOA was a typographical error, and should read "Applicant's Option."